



Taking Care of the Crops.

The greatest handicap which can be placed on a miller is to have to contend with the off-grade wheat. Wheat that has been wet in the shock, sprouted, bleached, musty stuff, mean to handle and impossible to grind, this is the worst of all evils which may beset the operative and one of the greatest sources of loss in running the mill.

There is also the wheat which has gone into the stack in apparent good shape and because of bad winds and heavy rains become soaked with water and then by heating become stack-burned and mouldy, or gone into the bins in a damp condition and come out later as bin-burned wheat, which is not only deceptive stuff to buy, but which makes unsound flour and loss if by any mischance it reaches the rolls.

No other subject is of more vital importance to millers than the quality of the wheat they grind. The miller, by force of business necessity, has no use for poor wheat. Unlike the statistician or the crop estimator, he thinks less of the number of total bushels raised or the given number of bushels per acre than he does of the quality of the grain and the proportion of it which finally reaches his bins in a condition which will allow it to be milled into the pure, uniform product upon which his trade is based.

In the settlement of a new country, where the production of wheat largely exceeds the local demand and the farmers are poor and have not the means to build granaries to hold their crops, there is a heavy movement of wheat "from the machine" as the quickest and easiest method of getting the grain raised off their hands. To get the money it brings into circulation is the one ambition of the farmer. The greater the number of acres of wheat he can raise, the cheaper the cost of production, and the celerity with which it is rushed to market counts for more than quality of product. Under such conditions there is little stacking of wheat and all the rains and winds have full opportunities to damage. The most promising outlook of a fine quality of wheat will be ruined in a week of bad weather while the farmer is "waiting for the machine," and as his neighbors are in the same expectant attitude, a period of bad weather succeeding harvest will ruin good grain and cause the loss of thousands of dollars in the lowering of grades.

The best and most successful farmers have learned from years of experience that it pays to stack their grain, especially their wheat. That mysterious process of going "through the sweat," by which wheat is improved in color and strength after being cut, had best be passed in the stack, for investigators and experts have found that the longer the period during which the berry remains in the chaff and straw the greater is the improvement of its quality.

The market depression which follows the custom of rushing the wheat to market immediately after harvest is too well known to need any comment. The supplies are temporarily larger than the power of absorption and prices are lowered in consequence, to the greatest detriment to the farmer himself. The miller later on suffers from this cause by having the cheap wheat exported to be brought into competition later in the crop year.

The interests of the miller in taking care of the wheat and having the farmer hold it as long as possible for gradual marketing is evident. There is nothing which can be done to regulate or control the weather, but all arguments favor the best pro-

tection which can be given the crop from the elements. As the harvest season approaches farmers should be urged to stack their wheat and give it the best chance possible to be high in grade and dry and sweet when threshed. If threshed in a dry condition there is little danger of a loss of grade afterwards. A difference of 10 to 15 cents a bushel in price because of quality alone is often the result of stacking wheat in a wet season. The farmer is the winner and the miller is glad to pay full prices for the best grain, and he don't want the poor stuff at any price.

The question of the best care of the crops is of increasing importance as milling demand requires more of the wheat raised. Advanced farming methods grow up side by side with increased milling facilities and both are benefited. There are no two classes which are in such close dependence upon each other as the miller and the farmer. The success of the one usually means the success of the other. In no other particular do the two interests harmonize as in the improvement of the wheat crop. No other element will improve the quality more than the care of the crop after cutting. It is in the interest of every miller to urge "stacking the wheat," and both will be the gainer by better qualities.—Milling and Grain News.

System in Feeding.

Animals cannot get the best results from their feed unless it is given them regularly and in quite uniform portions. Every farmer should have a regular system for the feeding of his farm animals, whether the animals be the ones used for the production of meat and milk or for the production of force to be expended in labor. Irregular meals are as bad for animals as for human beings. The digestive systems adapt themselves to certain habits and seem to be as much opposed to irregularity as if they were sentient beings. On many farms there is no system of feeding and the results obtained are poor. One man will work his horses for hours beyond their regular meal times. During the last hour or so the animal is losing vigor rapidly. He is given food when his strength is partly exhausted. The stomach had not the vigor of digestion that it had at the regular eating time, and the result is more or less disarrangement, sometimes resulting in the imperfect digestion of the food taken. This is a matter that every human being has experienced himself. The results are far more disastrous than we have been led to suppose. The fact is easier to establish than the reason for it. The cow, the pig, and the sheep, when depending on man to do the feeding fare best and thrive best when their food comes in accordance with a regular system. It is not so much a question of how many meals an animal has a day as of their regularity.

Oleo in Iowa.

The Iowa Supreme Court has handed down another decision going to strengthen the position of the state law on the question of oleomargarine colored to resemble butter. The state law prohibits the selling in the state of all oleomargarine colored yellow to resemble butter. A Chicago company appealed a case from the lower court on the contention that the law of Iowa as it relates to the colored matter in oleomargarine is unconstitutional, as the color in the oleomargarine came in naturally by the use of ingredients natural to the things from which oleomargarine is made. The court holds that it makes no difference how the color got in; if the coloring matter is there in sufficient quantities to make the oleomargarine resemble butter it is an illegal product. The court goes further and declares that the state could, if it wished, prevent absolutely the sale of oleomargarine. The decision also recites that the original intention in the manufacture of oleomargarine was to make it so resemble butter that the consumer could not tell it from the thing it imitated and thus permit the dealers to sell it for butter.

POULTRY



The Incubator on the Farm.

The incubator and brooder are the modern allies of the poultry raiser. Originally the fowl laid but few more eggs than she could hatch. It is different now. We have developed our hen to lay 150 eggs a year, and she can at most hatch not more than thirty of them. To keep the hatching ability up to the laying ability we have had to invent the incubator and brooder. These machines are especially adapted to the use of people that are making a business of poultry raising, but they are also adapted in a lesser degree to the use of our farmers that keep flocks of a hundred or more fowls. On some of our large farms from 200 to 500 fowls are raised annually. Yet in a good many instances the only means of hatching is from hens. The operation drags along through the summer, with the result that in the fall the farmer has a good many kinds and sizes of fowls for sale, some of them marketable and some not. On a farm such as we have mentioned it will certainly pay to buy and use an incubator and brooder or brooders.

In the first place there is uniformity in the flock, both as to age and size. The birds can be raised by the hundreds in March and April, at which time eggs are readily obtainable, and when fall comes the birds that are to be disposed of will be all of a size and well grown. They will then bring a better price than otherwise, if the seller knows his business. This will be true whether the birds are sent to some commission house or are disposed of to the private trade.

Another advantage in using an incubator is the increased certainty of having chicks at all. There are some years, as all of our poultry raisers know, when the hens show little inclination to be broody and more than once the poultry raiser has found himself at the beginning of summer with only half the number of chicks he expected to have. The number to be hatched is controllable by the machines, but not otherwise. A man can start the machines in February or March and hatch till he has secured the number he wants for raising. Then he can stop. If the first hatches prove a disappointment he can continue to use his machine a little longer. Not so the hen. She will often disappoint one and then make no second attempt to make good her promises to bring forth a brood.

Then, too, the brooder removes the necessity of making nests for the sitting hens. This is a large task where hundreds of birds are to be raised. Frequently the nests of the sitters interfere with the placing of nests for laying purposes. The care of the hens is certainly as great as is the care of the incubator, and after one becomes expert with the incubator the care is less. The care of an incubator lessens in proportion as we get acquainted with it, which can scarcely be said of the hen. We have referred only to the use of the incubator in the spring, as the fall use relates to the production of broilers, which is a business almost of itself. The incubator also makes it possible to get the birds out of the shell in time to develop into winter layers before the snow flies.

Packing and Shipping Eggs in Denmark.

The work of grading and testing is done mostly by women, who become very expert. The eggs are graded according to weight. There are six recognized classes, ranging from 6½ to 9 kilograms per 120 eggs (1.43 to 2 pounds per dozen eggs). The expert graders work behind a long table, upon which they have six wooden egg racks, or frames, each frame with ten

dozen holes in which the eggs are placed. The graders can tell at a glance to which grade an egg belongs, and they distribute them very deftly. When a frame is filled with ten dozen eggs (which are taken directly from the boxes received from the circles), the frames are taken by a man and weighed. If the 120 eggs weigh too much or too little for the grade for which they are intended, eggs are taken out and substituted with larger or smaller ones, as the case may be. The frame of 120 eggs is taken into a small, tightly closed room and set on top of a hopper-shaped box, which is about two feet deep, the sides of which are lined with looking-glass. The bottom of this hopper-shaped box is about eight by thirty inches. Four sixteen-candlepower electric lights stand up from the bottom, equal distances apart. The eggs, as above indicated, are placed over these lights and looking-glasses, thick ends up. The tester looks carefully at and through each egg, and if any be unsound they are rejected.

The eggs are then carefully and snugly packed, side by side, with nothing between them, in four layers, in pine boxes 22 by 72 inches, nine inches deep. Between each two layers of eggs is a substantial layer of straight, clean rye straw; on the top layer of eggs another layer of straw. The thin boards are securely nailed on, the boxes are properly marked with the company's trade-mark, the number of eggs and the grade indicated, and they are sent to the ship. All eggs are sold by the pound. The co-operative company pays all expenses from the time the eggs leave the circles until they are placed on board ship. The average expense is about one cent per dozen. The cost of collecting the eggs from the farmers and bringing them to the circle centers is borne by the circles themselves. This work is done by a collector selected by the circle board. The collector is usually paid so much per pound of eggs collected. The expense of this collection is very low, perhaps on an average not more than one-half cent per dozen. The total cost to the farmer from the time the eggs leave the nests until they are on board steamer is therefore one and one-half cent per dozen.—United States Consular Report.

To Get Winter Eggs.

I have been in the poultry business for a long time, and my experience has convinced me that the first thing to do to secure winter eggs is to have a warm place for the hens. The temperature should not be lower than about 40 degrees above zero. I feed all kinds of grain I can get, but not too much corn, as in that case the birds will get too fat. The houses and yards should be kept very clean, and the fowls should not be allowed to eat foul stuff. They should have a good deal of exercise, and this may be induced by throwing grain into litter. The nests should be kept clean and the nest litter changed quite often. Green cut bone is the best thing to stimulate egg production that I have ever used.

J. K. Austin,
Iroquois County, Illinois.

Pigs in Prison.

In the older parts of the country it has been the practice to keep the pigs shut up from birth to maturity. A little pen in the barn was thought to be sufficient and sometimes there was even no yard for the pigs to run out in. The said pen was sometimes only six or eight feet square. Here the pigs were kept close prisoners. No wonder that troubles like thumps were common with pigs so treated. To some extent this practice still remains. There is no question that swine should be given room for exercise, even if no pecuniary advantage can be figured from it. None of our farms are so small that there is not an abundance of room for the yard that should be connected with every pig pen. The larger the yard the better, and if it is large enough to be divided into sections in which green stuff may be grown alternately, it will be the more profitable.